## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 8, April 2023

## Infiltration and its Socioeconomic Consequences in West Bengal

Dipankar Sarkar<sup>1</sup> and Dr. Nitin Kumar<sup>2</sup>

Research Scholar, Department of Arts<sup>1</sup> Research Guide, Department of Arts<sup>2</sup> Sunrise University, Alwar, Rajasthan, India

**Abstract:** Infiltration, the unauthorized entry of individuals from neighboring countries, has had profound socioeconomic ramifications in West Bengal, India. This paper explores the multifaceted impact of infiltration on various aspects of society and the economy in the state. It delves into the demographic shifts, labor market dynamics, resource allocation, and social cohesion influenced by infiltration. Moreover, it discusses the challenges faced by the state and offers policy recommendations to address the socioeconomic consequences effectively.

**Keywords:** Infiltration, Socioeconomic, Consequences, West Bengal, Migration Demographics, Politics, Economy, Immigration, Impact

## REFERENCES

- Soil Survey Staf. Soil survey manual, United States Department of Agriculture. Agriculture Handbook No. 18. Washington, D.C., 213 pp (1951).
- [2]. Horton, R. E. An approach toward a physical interpretation of infltration capacity. Soil Science Society of America Proceedings 5, 399–417 (1940).
- [3]. Chow, V. T., Maidment, D. R. & Mays, L. W. Applied Hydrology. (McGraw-Hill, New York, 1988). 45. Maidment, D.R. (editor-in-chief). Handbook of Hydrology. McGraw-Hill, New York, pp. 5.1-5.51 (1993).
- [4]. Kutílek, M. & Nielsen, D. R. Soil Hydrology. Catena Verlag, Reiskirchen, Germany, (1994).
- [5]. Fodor, N., Sándor, R., Orfanus, T., Lichner, L. & Rajkai, K. Evaluation method dependency of measured saturated hydraulic conductivity. Geoderma 165(1), 60–68 (2011).
- [6]. Swartzendruber, D. A quasi-solution of Richards' Equation for the downward infltration of water into soil. Water Resources Research 23(5), 809–817 (1987).
- [7]. Clausnitzer, V., Hopmans, J. W. & Starr, J. L. Parameter uncertainty analysis of common infltration models. Soil Science Society of America Journal 62(6), 1477–1487 (1998).
- [8]. Stroosnijder, L. Cumulative infltration and infltration rate in homogeneous soils. Agricultural Research. 847, 69–99 (1976).
- [9]. 51. Brutsaert, W. Vertical infltration in dry soil. Water Resources Research 13, 363–368 (1977).
- [10]. Hwang, S. I., Lee, K. P., Lee, D. S. & Powers, S. E. Models for estimating soil particle-size distributions. Soil Science Society of America Journal 66(4), 1143–1150 (2002).
- [11]. Russo, D. Determining soil hydraulic properties by parameter estimation: On the selection of a model for the hydraulic properties. Water Resources Research 24(3), 453–459 (1988).
- [12]. Akaike, H. A new look at the statistical model identification. IEEE Transactions on Automatic Control 19(6), 716–723 (1974).
- [13]. R Core Team (2018). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. available at: <u>https://www.R-project.org</u>.
- [14]. Carpenter, J. & Bithell, J. Bootstrap confidence intervals: when, which, what? A practical guide for medical statisticians. Statistics in Medicine 19(9), 1141–1164 (2000).
- [15]. Alagna, V., Bagarello, V., Di Prima, S., Giordano, G. & Iovino, M. Testing infltration run efects on the estimated water transmission properties of a sandy-loam soil. Geoderma 267, 24–33 (2016).

DOI: 10.48175/568







International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 8, April 2023

